

IN THE CLAIMS:

Please amend the claims as set forth below:

1. (Currently Amended) A computer accessible storage medium encoded with instructions forming a checkpoint service, wherein the instructions, when ~~which, when~~ executed:

receive a request to register a checkpoint segment from an application that is separate from the checkpoint service;

replicate ~~[[a]]~~ the checkpoint segment from a first local storage of a first node to at least one other node responsive to the application registering the checkpoint segment with the checkpoint service, wherein the checkpoint segment is stored into the first local storage by ~~[[an]]~~ the application, and wherein the checkpoint segment comprises a state of the application, and wherein the first local storage is directly accessible only to the first node; and

load a copy of the replicated checkpoint segment from the at least one other node into a second local storage of a second node responsive to a request from the second node to load the copy, wherein the second node is to execute the application.

2. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the checkpoint segment is identified by a checkpoint segment name that is unique within a cluster including the first node and the second node.

3. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the at least one other node comprises two or more other nodes.

4. (Previously Presented) The computer accessible storage medium as recited in claim 1

wherein the request to load the copy is issued by the application executing on the second node.

5. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the request to load the copy is issued by an agent that monitors the application on behalf of a cluster server.

6. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the instructions, when executed, retrieve the copy from one of the at least one other node responsive to the request.

7. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the at least one other node is configured to load the copy into a global storage, and wherein the instructions, when executed, retrieve the copy from the global storage responsive to the request.

8. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the instructions, when executed, replicate the checkpoint segment by performing at least:

reading the checkpoint segment from the first local storage of the first node; and

transmitting the checkpoint segment to the at least one other node.

9. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the instructions, when executed:

receive a retrieval request in the at least one other node; and

transmit the copy to a source of the retrieval request.

10. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the instructions, when executed:

receive the checkpoint segment from the first node in the at least one other node;
and

store the checkpoint segment in the at least one other node.

11. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the at least one other node is configured to load the copy into a global storage, and wherein the instructions, when executed:

receive the checkpoint segment from the first node; and

store the checkpoint segment in the global storage.

12. (Previously Presented) The computer accessible storage medium as recited in claim 1 wherein the at least one other node is not capable of executing the application.

13. (Currently Amended) A method comprising:

an application storing a checkpoint segment of the application's state to a local storage of a first node on which the application is executing, wherein the local storage is directly accessible only to the first node;

the application registering the checkpoint segment with a checkpoint service that is separate from the application;

the checkpoint service replicating a checkpoint segment from the first local storage of the first node to at least one other node responsive to the registering and the storing; and

loading a copy of the replicated checkpoint segment from the at least one other node into a second local storage of a second node responsive to a request from the second node to load the copy, wherein the second node is to execute the application.

14. (Original) The method as recited in claim 13 wherein the at least one other node comprises two or more other nodes.

15. (Original) The method as recited in claim 13 further comprising issuing the request to load the copy by the application executing on the second node.

16. (Original) The method as recited in claim 13 further comprising issuing the request to load the copy by an agent that monitors the application on behalf of a cluster server.

17. (Original) The method as recited in claim 13 further comprising retrieving the copy from one of the at least one other node responsive to the request.

18. (Original) The method as recited in claim 13 wherein the at least one other node is configured to load the copy into a global storage, the method further comprising retrieving the copy from the global storage responsive to the request.

19. (Original) The method as recited in claim 13 wherein replicating the checkpoint segment comprises:

reading the checkpoint segment from the first local storage of the first node; and

transmitting the checkpoint segment to the at least one other node.

20. (Original) The method as recited in claim 13 further comprising:

receiving a retrieval request in the at least one other node; and

transmitting the copy to a source of the retrieval request.

21. (Original) The method as recited in claim 13 further comprising:

receiving the checkpoint segment from the first node in the at least one other node; and

storing the checkpoint segment in the at least one other node.

22. (Original) The method as recited in claim 13 further comprising:

receiving the checkpoint segment from the first node; and

storing the checkpoint segment in a global storage.

23. (Original) The method as recited in claim 13 wherein the at least one other node is not capable of executing the application.

24. (Currently Amended) A cluster comprising a plurality of nodes, wherein a checkpoint service executing on a first node of the plurality of nodes is configured to replicate a checkpoint segment from a first local storage of the first node to at least one other node of the plurality of nodes, wherein the checkpoint segment is stored into the first local storage by an application executing on the first node separate from the checkpoint service, and wherein the application is configured to register the checkpoint segment with the checkpoint service, and wherein the checkpoint service is configured to replicate the checkpoint segment responsive to the application registering the checkpoint segment and storing the checkpoint segment to the local storage, wherein the local storage is directly accessible only to the first node of the plurality of nodes, and wherein the checkpoint segment comprises a state of the application, and wherein the checkpoint

service executing on a second node of the plurality of nodes is configured to load a copy of the replicated checkpoint segment from the at least one other node into a second local storage of the second node responsive to a request to load the copy, wherein the second node is to execute the application.

25. (Original) The cluster as recited in claim 24 wherein the at least one other node is not capable of executing the application.

26. (Currently Amended) The computer accessible storage medium as recited in claim 1 wherein the instructions, when executed:

~~receive a request to register the checkpoint segment from the application; and~~

record a name of the checkpoint segment to access the checkpoint segment for replicating.

27. (Previously Presented) The computer accessible storage medium as recited in claim 26 wherein the instructions, when executed:

select the at least one other node to which the checkpoint segment is to be replicated responsive to the request to register the checkpoint segment.

28. (Currently Amended) The method as recited in claim 13 further comprising:

~~the application registering the checkpoint segment; and~~

recording a name of the checkpoint segment to access the checkpoint segment for replicating responsive to the registering.

29. (Previously Presented) The method as recited in claim 28 further comprising:

selecting the at least one other node to which the checkpoint segment is to be replicated responsive to the registering.